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March 28, 2008

SC PUBLIC SERVICE  
COMMISSION  
Mr. Charles L.A. Terreni  
Chief Clerk/Administrator  
The Public Service Commission of South Carolina  
P.O. Drawer 11649  
Columbia, SC 29211

RE: Docket No. 2005-385-E

Dear Mr. Terreni:

Please find enclosed for filing and copying the original and one copy of pre-filed testimony of Pamela Greenlaw, Witness and Intervenor, in the above-referenced docket.

Sincerely,



Pamela Greenlaw  
Witness and Intervenor

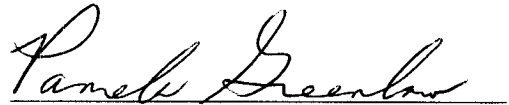
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**BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA  
DOCKET NO. 2005-385-E**

Petition of the Office of regulatory Staff	)	
To Establish Dockets to Consider	)	
IN RE: Implementing the Requirements of Section 1251	)	<b>CERTIFICATE OF SERVICE</b>
(Net Metering and Additional Standards) of	)	
The Energy Policy Act of 205	)	

I, Pamela Greenlaw, hereby certify that the Testimony of Pamela Greenlaw in the above-referenced docket have been placed in the US Mail on this date, to the parties of record at the addresses shown on attached page with sufficient postage on each envelope.

This the 28<sup>th</sup> day of March, 2008.



Pamela Greenlaw,  
Witness and Intervenor

# Service List For Docket 2005-385-E

**Petition of the Office of Regulatory Staff to Establish Dockets to Consider  
Summary: Implementing the Requirements of Section 1251 (Net Metering and  
Additional Standards) of the Energy Policy Act of 2005**

**Industry:** Electric

**Opened:** 12/12/05

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1 Testimony of

2 Pamela Green law

3 Utility Proposals of Charges, Fees, and Tariffs pertaining to Docket # 2005-385-E (Net Metering)

4 March 28, 2005

5  
6Q. Please state your name, address, and educational background, and pertinent experience

7 A. My name is Pamela Greenlaw. I live at 1001 Wotan Road, Columbia, SC 29229. I was awarded a B.A. in

8 Elementary and Middle School Education in 1975 by the University of North Carolina at Greensboro. In August  
9 of 1981 I was awarded a Masters of Education for the University of South Carolina. As results of personal and  
10 environmental interests I have studied the progress and success of net metering in the United States  
11 extensively and try to stay abreast of constant updates. I am continuing in a position of intervenor from the  
12 last hearing under this docket.

13Q. What is the purpose of your testimony today?

14A. I offer testimony to the end that a successful, effective, and fair net metering system will be constructed for  
15 customer generators in South Carolina as desired by the South Carolina PSC. I will seek to delineate obstacles  
16 and suggest solutions to those obstacles to net metering such as are created by the current proposals of  
17 charges, fees, tariffs and practices for implementing net metering by the 3 investor-owned utilities, Duke,  
18 Progress Energy, and South Carolina Electric and Gas, all hereafter referred to as the utilities in this testimony.

19Q. How is the success of a net metering program measured?

20A. The International Renewable Energy Council's (IREC) studies of net metering programs in the United States  
21 determined that successful programs promote saturation and penetration of renewable energy into  
22 economic markets. A minimum sign-up rate of 67 customer generators per million is evidence of substantial  
23 progress. States use as another indicator of success the attainment of graduated benchmarks that increase  
24 the amount of energy produced from truly renewable sources expressed as a percentage of total electric  
25 power production. Typically this indicator is related to a state goal set out by means of a Renewable Portfolio  
26 Standard, or RPS. One state has set a goal of one million solar roofs!

27 An informal measure of success is a bit intangible. Since those seeking to net meter have multiple goals,  
28 success for that person is being able to actually net meter! Goals include more than lowering one's electric  
29 bill. Many desire to contribute to the quality of life of their neighbors by using renewable, non-polluting  
30 energy.

31Q. What are the best practices that successful states use to ensure successful net metering?

32A. I have compiled and appended as Exhibit Best Practices a list of these best practices using data from The  
33 Solar Energy Power Association (SEPA), from IREC, and from the Apollo Alliance. The focus today will be on  
34 the avoidance of charging redundant, arbitrary, and/or punitive fees. Part of the success of net metering is  
35 incorporated in the interconnection standards and interconnection agreements, so although

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36interconnection is not the main emphasis of today's hearing, some of its provisions cause unnecessary  
37charges or fees which are obstacles to net metering.

38Q. What do you see as the obstacles to net metering as proposed by the utilities?

39A. Primarily, the obstacles are lack of transparency; shifting and inconsistent rules; a "taking" of the customer  
40generator's property in the form of zeroing out any excess generation of power, not providing any  
41compensation to the customer generator after a year's cycle; fees and charges which are redundant (and  
42thus excessive and discriminatory); and fees and charges not based on solid engineering science or on  
43studies available from utilities that have been managing successful net metering for over 5 years. It is these  
44convolutions in the proposed systems will drive up administrative costs for the utilities.

45First, transparency allows for shifting and inconsistent rules. Duke establishes its summer peak hours for flat rate  
46under Rider SCE, Schedule RT from March to September from 7AM through 11PM. Then for TOU customers  
47Duke changes the peak hours to 1PM through 7PM. If the sun has not shifted, the calendar has not changed,  
48and suddenly all the customers have not changed their power-consuming habits, there is no reason for the  
49peak hours to change.

50Furthermore, the utilities charge more for basic facilities charges although the costs of the use of facilities by  
51customer generators have not been studied. Duke creates unnecessary variations of its basic facilities  
52charge in Rider SCG. For Schedule RT the basic facilities charge is \$11.59, but for schedule PP the basic  
53facilities charge is \$15.34 because a supplemental charge is added.

54SCE&G charges a basic facilities charge for residences \$8 using Rate 8 which SCE&G proposes as the  
55schedule to be followed for their flat rate for net metering. If a customer generator wants to go to TOU and  
56use the smart meter, s/he has to pay \$12 for the basic facilities charge. There is no evidence of a need for this  
57fluctuation. Progressive Energy charges residential customers \$6.50 for basic facilities but requires the  
58customer generator a whopping \$25 simply for basic facilities.

59Unplanned charges and invasion of privacy come in the form of SCE&G's requirement (threat) that the utility  
60use the customer generator's telephone. I had a meter that needed to be checked, and an SCE&G worker  
61came equipped with his business phone. Why should there be a shift in routine costs if I were to have a solar  
62system on my house?

63Second, power put onto the grid by the customer generator needs to be fully credited. With a nod to fairness  
64of credit structure created by the utilities, except for SCE&G in its treatment of the flat rated net meterer, the  
65customers will receive full retail credit on their successive month's bill for NEG (net excess generated energy –  
66from the customer generator's side). The obstacle here is the matter of the utilities enacting a "taking" of the  
67customer generator's NEG at the end of the annual cycle. This is an additional disincentive and basically  
68constitutes theft. Most net metering customers will produce only enough power for their own needs and will  
69not produce NEG in enough excess to be considered as an additional neighborhood power-generating  
70station. What NEG is carried over at the end of the annual cycle should be fully compensated at the full retail  
71rate or be continued to carry over until the agreement between the utility and the customer ends.

72Third, many of the fees, charges and tariffs in the utilities' proposals are redundant. If the basic facilities  
73charges are increased there is no reason for additional demand charges. This makes demand charges  
74redundant. If both of these charges are not based upon scientific engineering data, they are discriminatory  
75as well as punitive.

76Q. What other charges, fees, and tariffs have a bearing on the disincentive of the utilities' proposals?

77A. Unfortunately, because net metering cannot be separated from interconnection, the interconnection requirements that were approved in December 2006 include some major obstacles. Although the interconnection standards and guides to agreements are under a different docket and thus cannot be changed in the proceeding, examining the costs of these requirements should bring home the point that the proposals heap more upon the potential net meterer, or customer generator past bearing.

The cost requirements in the interconnection standards and agreements include items that have been eliminated or charges greatly reduced in other states. First, the external disconnect switch that is required is a hold-over from the days when equipment manufactured for home generation had not undergone design and certification by UL or any other reputable electrical engineering organization. Back-feeding of electricity is now solved. External switches are redundant nowadays, particularly for systems on residences. Several states require the external switch on all DG systems except for those that have inverters compliant with IEEE 1547. This is a good compromise.

Other costs born unnecessarily by the customer generator are those of maintaining additional insurance at \$100,000 per incident. Interconnection equipment is already designed to minimize risk. Utilities need to ensure their workers are thoroughly trained. Insurance on the house should exist, but a reasonable person can see that the company bears responsibility for its utility workers' safety and indeed already has insurance in place to cover their workers. Progress Energy has inserted in its interconnection agreement the Sword of Damocles statement of possibly having to install (redundant) "safety equipment" for unknown reason. If the customer's equipment is certified and tested there is no need for intimidating language that frightens off potential net metering customers.

97Q. What are your recommendations to solve the obstacles and to bring about a successful net metering system for South Carolina as far as the investor-owned utilities are concerned?

99A. The facilities charges should be identical to those imposed for customers in classes of similar

type and power need. Demand charges need to be eliminated. Designation of what hours are

peak and off peak should be the same for all power customers within the jurisdiction of the same utility. Crediting for NEG needs to be one-for-one Kwh at the retail rate, so the simplest system for both the customer generator and the utility is a flat rate system. Credit any extra power generated at the end of a billing year into the successive months or pay for that net generation to the customer generator who produced that power.

Installation of two meters should be avoided. Streamline the interconnection process. Revisit the interconnection standards and agreements to revise them to meet modern technology. Eliminate extra beyond-the-normal residential insurance provisions.